# IP Link® Device Interface Communication Sheet



This document provides additional assistance with wiring your Extron IP Link enabled product to your device. Different components may require a different wiring scheme than those listed below.

For complete operating instructions, refer to the user's manual for the specific Extron IP Link enabled product or the controlled device manufacturer supplied documentation.

## *Device Specifications:*

| | |
|---|---|
| Device Type: | Touch Display |
| Manufacturer: | Sharp |
| Firmware Version: | N/A |
| Model(s): | PN-L603A, PN-L603B, PN-L703A, PN-L703B |

## *Version History:*

| Driver Version | Date | IP Link Compiler | GC Version | Notes |
|---|---|---|---|---|
| 1 | 9/24/2014 | 1.6.0 | 3.5.2 | Extron certified version. Tested on PN-L603A model. |

## *Driver Notes:*

Driver includes volume optimization.

***Control Commands & States:***

| | | | |
|---|---|---|---|
| **Aspect Ratio** | Wide | Normal | Dot by Dot |
| | Zoom 1 | Zoom 2 | |
| **Auto Image** | Execute | | |
| **Input**[1] | PC D-SUB | Component | Video |
| | AV HDMI | PC HDMI | AV HDMI2 |
| | PC HDMI2 | DisplayPort | D-SUB2 |
| | AV HDMI3 | PC HDMI3 | Whiteboard[2] |
| | Toggle | | |
| **Mute** | On | Off | |
| **PIP Input** | PC D-SUB | Component | Video |
| | AV HDMI | PC HDMI | AV HDMI2 |
| | PC HDMI2 | DisplayPort | D-SUB2 |
| | AV HDMI3 | PC HDMI3 | Whiteboard[2] |
| **PIP Mode** | PIP 1 | PIP 2 | PIP 3 |
| | Off | | |
| **PIP Position Horizontal** | 0 to 100 in steps of 1 | | |
| **PIP Position Vertical** | 0 to 100 in steps of 1 | | |
| **PIP Size** | 1 to 64 in steps of 1 | | |
| **Power Control** | On | Off | Whiteboard Standby Mode[1] |
| **Touch Mode**[3] | On | Off | |
| **Volume (Discrete)** | 0 to 31 in steps of 1 | | |

[1] Terminals not selected in INPUT SELECT in SETUP MENU cannot be selected.
[2] Only for PN-L603A and PN-L703A.
[3] Only available when the input mode is PC.

***Status Available:***

| | | | |
|---|---|---|---|
| **Aspect Ratio** | Wide | Normal | Dot by Dot |
| | Zoom 1 | Zoom 2 | |
| **Connection Status** | Connected | Disconnected | |
| **Input** | PC D-SUB | Component | Video |
| | AV HDMI | PC HDMI | AV HDMI2 |
| | PC HDMI2 | DisplayPort | D-SUB2 |
| | AV HDMI3 | PC HDMI3 | Whiteboard[1] |
| **Mute** | On | Off | |
| **PIP Input** | PC D-SUB | Component | Video |
| | AV HDMI | PC HDMI | AV HDMI2 |
| | PC HDMI2 | DisplayPort | D-SUB2 |
| | AV HDMI3 | PC HDMI3 | Whiteboard[1] |
| **PIP Mode** | PIP 1 | PIP 2 | PIP 3 |
| | Off | | |
| **PIP Position Horizontal** | 0 to 100 in steps of 1 | | |
| **PIP Position Vertical** | 0 to 100 in steps of 1 | | |
| **PIP Size** | 1 to 64 in steps of 1 | | |
| **Power Control** | On | Off | Whiteboard Standby Mode[1] |
| **Touch Mode[2]** | On | Off | |
| **Volume (Discrete)** | 0 to 31 in steps of 1 | | |

[1] Only for PN-L603A and PN-L703A.
[2] Only available when the input mode is PC.

***MLC60 Series Supported Commands:***

| | | | |
|---|---|---|---|
| **Aspect Ratio** | Wide | Normal | Dot by Dot |
| | Zoom 1 | Zoom 2 | |
| **Auto Image** | Execute | | |
| **Input**[1] | PC D-SUB | Component | Video |
| | AV HDMI | PC HDMI | AV HDMI2 |
| | PC HDMI2 | DisplayPort | D-SUB2 |
| | AV HDMI3 | PC HDMI3 | Whiteboard[2] |
| | Toggle | | |
| **Mute** | On | Off | |
| **PIP Input** | PC D-SUB | Component | Video |
| | AV HDMI | PC HDMI | AV HDMI2 |
| | PC HDMI2 | DisplayPort | D-SUB2 |
| | AV HDMI3 | PC HDMI3 | Whiteboard[2] |
| **PIP Mode** | PIP 1 | PIP 2 | PIP 3 |
| | Off | | |
| **Power Control** | On | Off | Whiteboard Standby Mode[1] |
| **Touch Mode**[3] | On | Off | |
| **Volume (Discrete)** | 0 to 31 in steps of 1 | | |

[1] Terminals not selected in INPUT SELECT in SETUP MENU cannot be selected.
[2] Only for PN-L603A and PN-L703A.
[3] Only available when the input mode is PC.

### *Cable and Adapter Requirements:*

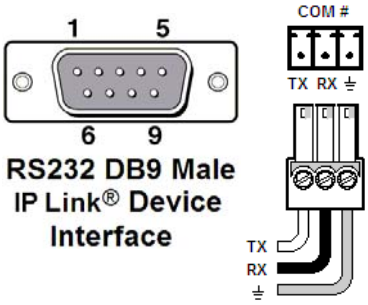
Female DB9 to Male 3.5mm Stereo Plug Cable.

### *Notes for the Device:*

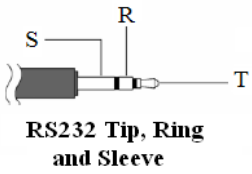
### *Serial communication:*

| | | | |
|---|---|---|---|
| **Port Type:** | RS-232 | **Parity:** | None |
| **Baud Rate:** | 38400 | **Stop Bits:** | 1 |
| **Data Bits:** | 8 | **Flow Control:** | None |

### *Pin Assignments Diagram:*




| Signal | Pin | Main Cable | Pin | Signal |
|---|---|---|---|---|
| RXD | 2 | ← | T | TXD |
| TXD | 3 | → | R | RXD |
| GND | 5 | — | S | GND |




Note: Captive screw connector may also be used as a serial connection.

### *General Notes:*